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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/817,832	03/26/2001	Stephen John Beynon	GB920000009US1	7881

25259 7590 10/22/2003

IBM CORPORATION  
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EXAMINER

NGUYEN, VAN H

ART UNIT	PAPER NUMBER
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2126

DATE MAILED: 10/22/2003

5

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

09/817,832

Applicant(s)

BEYNON ET AL.

Examiner

VAN H NGUYEN

Art Unit

2126

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 26 March 2001.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All   b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)                      4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)                      5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.                      6) ☐ Other:

Art Unit: 2126

### DETAILED ACTION

1. This Office Action is in response to the application filed 03/26/2001. Claims 1-23 are presented for examination.

#### *Specification*

2. The abstract of the disclosure is objected to because it exceeds the limit of a single paragraph. Correction is required. See MPEP § 608.01(b).

#### *Claim Rejections - 35 USC § 102*

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-23 are rejected under 35 U.S.C. 102(e) as being anticipated by **Wygodny et al.** (U.S. 6,282,701 B1).

**As to claim 1**, Wygodny teaches in a distributed data processing system comprising a plurality of data processing nodes connected via a network, each node having a processor, memory and operating system capable of executing application programs, each of the operating

systems including data exchange means, the nodes communicating by asynchronous messaging via respective data exchange means and each node including process-private interrupt handling means for indicating the presence of a command for a respective process in the data exchange means, a method for remote tracing from a local one of the data processing nodes of the execution of a process within an application program running on a remote one of the data processing nodes, the application program including its own local trace facility (*fig. 2 and abstract*), the method comprising the steps of:

- sending a trace command from a trace process running on the local data processing node into a data exchange means of the remote data processing node (*sends the TCI file 120 and a small tracing application called the agent 104 to a user 110... loading a client-side trace library 125 into the address space of the client 102*; col.5, lines 25-53);

- in response to the trace command, causing a process-private interrupt of a target process running on the remote data processing node (*attach the client-side trace library 125 to the client 102 involves replacing selected object code instructions ... with interrupt 'INT' instructions to create trace points*; col.7, lines 24-67);

- in response to the process-private interrupt, the target process writing trace information from the trace facility to the data exchange means of the remote data processing node (*The trace data collected by the client-side trace library 125 is written to the trace buffer 105... the agent 104 copies the contents of the trace buffer 105 to a trace log file 122*; col.6, lines 1-20);

- transmitting the trace information across the network; receiving in a data exchange means on the local data processing node, the trace information (*fig. 2*);

- in response to receiving the trace information, causing a process-private interrupt of the trace process (*col.27, lines 6-41*); and

- in response to the process-private interrupt, reading the trace information by the trace process, from the local data exchange means (*The analyzer 106 comprises a User Interface module that reads trace data...only the trace data needed for the display in the user interface at any given time is read from the log file 122; col.8, lines 1-20*).

**As to claim 2**, Wygodny teaches writing a trace command from a trace process into the local data exchange means; initiating the process private interrupt on the local data processing node in response to the trace command; transmitting the trace command across the network; and replicating the process-private interrupt on the remote data processing node in response to the trace command (*col.6, lines 1-20 and fig. 2*).

**As to claim 3**, Wygodny teaches after the step of causing a process private interrupt of a target process, the process private interrupt is re-enabled (*col.27, lines 6-41*).

**As to claim 4**, Wygodny teaches after the step of the target process writing trace information, the target process is re-started from the beginning of its execution (*col.6, lines 1-20*).

**As to claim 5**, Wygodny teaches the remote data exchange means and the local data exchange means are mailboxes (*figs. 1A, 1B*).

**As to claim 6**, Wygodny teaches each of the remote data exchange means and local data exchange means comprise separate mailboxes for the reading and writing trace information operations, respectively (*col.6, lines 1-54*).

**As to claim 7**, Wygodny teaches the trace information is encrypted on the remote data processing node (*col.5, line 25- col.6, line 54*).

**As to claim 8**, Wygodny teaches the trace information is decrypted on the local data processing node (*col.5, line 25- col.6, line 54*).

**As to claim 9**, Wygodny teaches the trace information is annotated. (*col.6, lines 1-54*).

**As to claim 10**, Wygodny teaches the network is the Internet (*col.6, line 25-col.7, line 23*).

**As to claim 11**, Wygodny teaches the trace information is viewed with a monitor of the data processing nodes. (*col.6, lines 1-54*).

**Claim 12** is directed to a computer program product for implementing the method of claim 1, and is similarly rejected under the same rationale.

**Claims 13-23** is directed to a system for performing the method of claims 1-11, and are similarly rejected under the same rationale.

### ***Conclusion***

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Garakani et al	US 6578087	issued date: 06/2003
- Watanabe	US 6385450	issued date: 05/2002
- Garrett	US 6243834	issued date: 06/2001
- Levy et al.	US 6145121	issued date: 11/2000

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to VAN H NGUYEN whose telephone number is (703) 306-5971.

Art Unit: 2126

The examiner can normally be reached on Monday-Thursday from 8:30AM - 6:00PM. The examiner can also be reached on alternative Friday.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-9000.

**Any response to this action should be mailed to:**

**Commissioner for Patents**

**PO Box 1450**

**Alexandria, VA 22313-1450**

**or fax to:**

(703) 746-7239 (for formal communications intended for entry)

(703) 746-7238 (for After Final communications)

(703) 746-7240 (for informal or draft communications)

VHN

October 20, 2003



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